

Lead and Copper Rule Fact Sheet

What is the Lead and Copper Rule?

What are the Health Effects of Lead and Copper?

What are the Action Levels for Lead and Copper, and What is an Action Level?

Who is Required to Sample for Lead and Copper?

How Do I Sample for Lead and Copper?

The Lead and Copper Rule was published in the *Federal Register* on June 7, 1991. It became effective on December 7, 1992. This rule requires treatment when lead and/or copper in drinking water exceed certain levels.

Lead enters drinking water mainly from the corrosion of lead-containing household plumbing. All water is corrosive to metal plumbing materials to some degree. Short-term health effects include: interference with red blood cell chemistry, delays in normal physical and mental development in babies and young children, slight deficits in attention span, hearing, and learning abilities of children, and slight increases in the blood pressure of some adults. Long-term health effects can include stroke, kidney disease, and cancer.

Copper contamination generally occurs from the corrosion of household plumbing. Copper is an essential nutrient, required by the body in small amounts. However, copper can cause the following health effects: stomach and intestinal distress, liver and kidney damage, and anemia. Persons with Wilson's Disease may be more sensitive than others to the effects of copper contamination.

An action level is a level, when the water is sampled, that ninety percent (90%) of your samples must be below. If the action level is exceeded, then further action is triggered.

The Lead Action Level is fifteen-hundredths milligrams per liter (0.015 mg/L). The copper action level is one and three tenths milligrams per liter (1.3 mg/L).

All community and nontransient noncommunity water systems are required to sample for lead and copper. Types of systems that might be included are: cities, towns, mobile home parks, subdivisions, hospitals, correctional facilities, schools, factories, office buildings, and day care centers.

Lead and copper are sampled in community water systems in customers homes at the kitchen or bathroom cold water tap after the water has been in contact with the plumbing for at least 6 hours. In noncommunity water systems, the samples are collected from interior drinking water taps after the water has been in contact with the plumbing for at least 6 hours. The number of samples required is based on the population served by the water system. Initially, samples are collected for 2 consecutive six-month monitoring periods (January to June and July to December), then sampling is reduced to once per year for 3 years, and then ultimately to once every 3 years.

How many samples am I required to collect?

Number of Samples Required for Lead and Copper Sampling		
System Size	Initial Monitoring	Reduced Monitoring
> 100,000	100	50
10,001 to 100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
< 101	5	5

What Do I Do If an Action Level is Exceeded?

If you exceed either the lead or copper action level, contact the Drinking Water Branch immediately. You will be required to collect samples for water quality parameters (alkalinity, calcium, conductivity, pH, temperature, and orthophosphate and/or silicate if either or both are added to your system) and for lead and copper in your source water. You will also need to make a treatment recommendation and install treatment to reduce the corrosivity of the water (it's ability to leach metals from plumbing). If you exceed the lead action level, you will also need to do Public Education.

Who Do I Contact If I Have Any Questions?

You should contact the *IDEM Drinking Water Branch* if you have any questions. Our number is (317)308-3282. You may also contact the *IDEM Environmental Helpline* at (800)451-6027 and ask them to connect you with 308-3282, or the *EPA Safe Drinking Water Hotline* at (800)426-4791.

Rule Citations

327 IAC 8-2-36, 327 IAC 8-2-37, 327 IAC 8-2-38, 327 IAC 8-2-39, 327 IAC 8-2-40, 327 IAC 8-2-41, 327 IAC 8-2-42, 327 IAC 8-2-43, 327 IAC 8-2-44, 327 IAC 8-2-45, 327 IAC 8-2-46, and 327 IAC 8-2-47.

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